

# Sustainability and Livability Benefits of the Subarea Plan

# 6

## 145th Street Station Subarea Plan

*Implementing the 145th Street Station Subarea Plan will result in a multitude of sustainability and livability benefits to the Shoreline community and surrounding region. This chapter of the plan summarizes the potential benefits that could be realized over the coming decades with transit-oriented development in the subarea.*

### An Introduction to the Benefits of Implementing this Plan

The 145th Street Station Subarea Plan proposes a framework of transit-oriented development (TOD) within walking distance of the planned light rail station. Implementing TOD can have significant benefits to individuals, communities, regions, states, the economy, and the natural environment. The success and benefits of TOD is a well-researched and documented topic. Findings from studies and information from the United States Environmental Protection Agency (US EPA), Center for Transit-Oriented Development (CTOD), Smart Growth America, and other sources are summarized in this chapter of the subarea plan.

There are significant opportunities that come with implementing transit-oriented development (TOD)—multifamily housing and mixed use in

compact form around high-capacity transit stations. A 2011 report from CTOD summarizes the benefits of TOD as:

- ▶ Improved mobility options, so people can walk and bike and take transit, and access multiple destinations in the region without a car;
- ▶ Increased transit ridership to support local and regional transit system operations and reduce traffic congestion;
- ▶ Quality neighborhoods with a rich mix of housing, shopping and transportation choices;
- ▶ Revenue generation for both the private and public sectors;
- ▶ Improved affordability for households through reduced transportation costs;
- ▶ Urban revitalization and economic development;
- ▶ Reduced infrastructure costs due to more efficient use of water systems, sewer systems and roads;
- ▶ Reduced energy consumption, greenhouse gas emissions and air pollution;
- ▶ Improved regional access to jobs; and
- ▶ Health benefits resulting from reduced auto dependence and healthier lifestyles.

## Transit-Oriented Development

**Transit-Oriented Development (TOD)** refers to communities with high quality public transit services, good walkability, and compact, mixed land use. This allows people to choose the best option for each trip: walking and cycling for local errands, convenient and comfortable public transit for travel along major urban corridors, and automobile travel to more dispersed destinations. People who live and work in such communities tend to own fewer vehicles, drive less, and rely more on alternative modes.

Various communities in California have implemented extensive TOD over the last several decades. A recent study, *Factors for Success in California's Transit-Oriented Development*, commissioned by the California Department of Transportation, identified the following ten potential benefits of TOD. It should be noted that while additional density and mixed uses within the subarea will likely increase the number of local people, households, cars, and jobs, residents and employees within TOD areas generally drive and emit less greenhouse gas emissions *per capita* than those in traditional single-family neighborhoods.

- ▶ **TOD CAN PROVIDE MOBILITY CHOICES.** By creating "activity nodes" linked by transit, TOD provides important mobility options for young people, the elderly, people who prefer not to drive, and those who don't own cars. Places that offer travel options are very much needed in congested metropolitan areas.
- ▶ **TOD CAN INCREASE PUBLIC SAFETY.** TOD development results in active places that are busy through the day and evening. Having such activity and lots of people around provides "eyes on the street" and helps increase safety for pedestrians, transit users, and many others.

- ▶ **TOD CAN INCREASE TRANSIT RIDERSHIP.** TOD improves the efficiency and effectiveness of transit service investments. It is estimated that TOD near stations increases transit use by 20 to 40 percent.
- ▶ **TOD CAN REDUCE RATES OF VEHICLE MILES TRAVELED (VMT).** Vehicle travel in many areas of the US tends to increase either at the same pace as population growth or to disproportionately higher levels. This has a lot to do with how land use patterns have been developed and creating housing and residential areas that are not accessible to employment areas with good transit systems. TOD can lower annual household rates of driving by 20 percent to 40 percent for those living, working, and/or shopping near transit stations.
- ▶ **TOD CAN BOLSTER HOUSEHOLDS' DISPOSABLE INCOME.** Housing and transportation rank as the first and second largest expenses in households, respectively. TOD can increase disposable income by reducing household driving costs: one estimate shows a household saving \$3,000 to 4,000 per year. The access to so many amenities in just a few short blocks can significantly increase a family's disposable income by eliminating the need for a second car.
- ▶ **TOD REDUCES GREENHOUSE GAS EMISSIONS, AIR POLLUTION, AND ENERGY CONSUMPTION RATES.** Since TODs provide safe and easy access to transit and typically occur in walkable and bikeable areas, people tend to drive less. As such, greenhouse gas emissions, air pollution and energy consumption rates are lower. TODs can reduce rates of greenhouse gas emissions by 2.5 to 3.7 tons per year for each household.
- ▶ **TOD CAN HELP CONSERVE RESOURCE LANDS AND OPEN SPACE.** Because TOD consumes less land than low-density, auto-oriented growth, it reduces the need to convert farmland and open spaces to development.

- ▶ **TOD CAN PLAY A ROLE IN ECONOMIC DEVELOPMENT.** TOD is increasingly used as a tool to help revitalize aging downtowns and declining urban neighborhoods, and to enhance tax revenues for local jurisdictions.
- ▶ **TOD CAN DECREASE INFRASTRUCTURE COSTS.** Since TOD features more compact development and often results from infill development, local governments can often reduce by up to 25 percent infrastructure costs of expanding water, sewage and roads.
- ▶ **TOD CAN CONTRIBUTE TO MORE AFFORDABLE HOUSING.** TOD can add to the supply of affordable housing by providing lower-cost and accessible housing, and by reducing household transportation expenditures. Housing costs for land and structures can be significantly reduced through more compact growth patterns

Another report by the US EPA details why TOD is beneficial to residents and the greater environment. Faced with an estimated 42-percent rise in population in the United States between 2010 and 2050, metropolitan centers around the country will soon see their population dynamics change. Already, almost every city in the country has had significant expansion in land area since 1950. With such population growth comes a need for more and better transportation options for residents and commuters.

The Puget Sound region is projected to grow by over 1 million people in the next twenty years. In Washington State, cities are required to demonstrate capacity to accommodate projected growth through zoning. Shoreline's portion of that allocation is 5,000 households and 5,000 jobs. However, accommodating growth targets is not the only reason to focus anticipated new households near transit. Creating nodes of density near transit implements "smart growth" principles discussed throughout this chapter, and supports more neighborhood-serving businesses. Redevelopment and regional investment brings infrastructure improvements, such as sidewalks and stormwater facilities, which have often been requested by residents for many years.

State growth projections also do not account for migration that may be the result of climate change, and Washington will likely be on the receiving end of such movement. Providing access to efficient transit service for more people, and utilizing green building techniques in new housing and commercial space can reduce greenhouse gas emissions, and are priority actions to mitigate the severity of climate change.

The environmental price of urban sprawl and highway construction often leads to the destruction of key ecosystems like wetlands and streams, which provide homes to important species and benefits like clean water and recreational activities to people living nearby. Encouraging development in areas that are already urbanized, known as infill development, spares ecosystems and the services they provide. The travel time savings they experience in shorter, easier commutes and more convenient neighborhoods translate to savings for fragile and significant ecosystems.

TOD translates to long-term economic and environmental benefits as well. In general, residents of areas with high population density tend to drive less. Doubling an area's population density could reduce its residents' vehicle use by five to twelve percent. Designing communities specifically to encourage public transit use, as with TOD, can create an even bigger impact: residents of areas with TOD are two to five times more likely to use transit for their commutes and general travels than residents of areas without TOD.

Residents and the environment both benefit from improved transit within the region. All residents, especially those with respiratory health concerns, will benefit from improved air quality. Fewer greenhouse gases from vehicle fuel combustion will enter the atmosphere, aiding in the fight against climate change. Residents without cars will be able to travel to previously inaccessible job markets and recreational activities.

Connecting more residents to the transit network will create quick and reliable ways for people to commute to work or experience the city and other areas along the light rail line without having to depend on a car, saving them money on gas and time in traffic.

# Supporting Adopted Federal, State, Regional, and Local Plans and Policies

There are several local, regional, state, and federal plans and policies that are relevant to the subarea plan. Refer to Chapter 1 for a more detailed description of these plans and policies. Implementation of the redevelopment proposed in the plan will support these adopted plans and policies in many ways:

- ▶ **PARTNERSHIP FOR SUSTAINABLE COMMUNITIES**—This subarea plan supports the United States Department of Housing and Urban Development (HUD), the Department of Transportation (DOT), and the Environmental Protection Agency (EPA) interagency partnership and aligned policies for sustainable communities. Expanding housing choices, integrating land use and transportation, and investing in vibrant and healthy neighborhoods that attract businesses are key principles that implementing the plan will support.
- ▶ **WASHINGTON STATE GROWTH MANAGEMENT ACT**—Implementing the subarea plan will result in growth and redevelopment that is consistent with the Growth Management Act’s statutory goals, including the importance of reducing urban sprawl, encouraging efficient multi-modal transportation systems, encouraging the availability of affordable housing, protecting the environment, and enhancing the state’s quality of life, among others. A key purpose of preparing this subarea plan is to create a framework for implementation that will ensure public facilities and services necessary to support development will be in place as the subarea grows, an important premise of the Growth Management Act.
- ▶ **VISION 2040 PLAN FOR THE PUGET SOUND REGION**—Implementation supports the long-range vision for maintaining a healthy region and promoting the well-being of people and communities, economic vitality, and a healthy environment for the central Puget Sound region. Specifically, the plan proposes

focusing growth within already urbanized areas to create walkable, compact, and transit-oriented communities that maintain unique local character. The plan also will provide a range of affordable, healthy, and safe housing choices and promote fair and equal access to housing for all people.

- ▶ **GROWING TRANSIT COMMUNITIES PARTNERSHIP**—This subarea plan is consistent with the Partnership’s commitment to make the most of the \$25 billion investment in regional rapid transit by locating housing, jobs, and services close enough to transit so that more people will have a faster and more convenient way to travel. The plan is consistent with the station area typology “Build Urban Places,” as discussed in Chapter 1.
- ▶ **COUNTYWIDE PLANNING POLICIES**—This subarea plan is consistent with the King County Countywide Planning Policies and provides the opportunity to meet assigned growth targets for Shoreline for decades to come. The plan supports the Countywide Planning Policies by establishing a framework for creating a vibrant, diverse and compact urban community and “focusing redevelopment where residents can walk, bicycle or use public transit for most of their needs.”
- ▶ **CITY OF SHORELINE VISION 2029 AND FRAMEWORK GOALS**—This subarea plan reinforces Shoreline’s vision for being a regional and national leader for living sustainably and creating a city of strong neighborhoods and neighborhood centers with diverse housing choices. Implementing the plan will support the Framework Goals that guide planning in Shoreline and contribute to improving community health and ensuring that Shoreline is a safe and progressive place to live, and better for the next generation and generations to come—all key premises of Vision 2029.



- **CITY OF SHORELINE COMPREHENSIVE PLAN**—The plan is consistent with and supports the City’s adopted Comprehensive Plan, including specific policies relevant to the light rail station subareas that call for expanding housing choices in proximity to the station, enhancing pedestrian and bicycle connectivity in the station subarea, and connecting residents from all neighborhoods in Shoreline to the stations in a reliable, convenient, and efficient manner. This subarea plan also provides transition from high-density multi-family residential and commercial development to single-family residential development through the proposed zoning designations and development standards. The subarea plan leverages the investment in light rail as a foundation for other community enhancements. Implementing this plan will promote a reduced dependence upon automobiles by developing transportation alternatives, promoting housing affordability and choice, and supporting neighborhood-serving businesses—all important policies in the City’s Comprehensive Plan.
- **SHORELINE CLIMATE ACTION PLAN AND ENVIRONMENTAL SUSTAINABILITY STRATEGY**—As previously mentioned, building more housing options in proximity to high-capacity transit and creating a more walkable and bikeable neighborhood over time will reduce the amount of miles people drive, and therefore carbon emissions—a key objective of the City’s Climate Action Plan. The Environmental Sustainability Strategy also provides direction about balancing economic development with social equity and environmental considerations. Successful implementation of the station subarea plan supports these objectives. Refer to discussion later in this chapter about “triple-bottom line” benefits and expected reductions in greenhouse gas emission levels as a result of implementation.



*Kids at Shoreline's School's Out Camp*

- **ECONOMIC DEVELOPMENT STRATEGIC PLAN**—The proposed redevelopment promotes placemaking and sustainable economic growth with proposed improvements that will attract investment and vertical growth, via sustainable multi-story buildings that efficiently enhance neighborhoods. In addition to creating more local jobs and providing more goods and services in Shoreline, increasing revenue from sales taxes also takes pressure off of property taxes to support the level of service and infrastructure improvements desired by the community.
- **TRANSPORTATION MASTER PLAN (WHICH ALSO FUNCTIONS AS THE TRANSPORTATION ELEMENT OF THE COMPREHENSIVE PLAN)**—Proposed transportation improvements of the subarea plan are consistent with the City’s Transportation Master Plan (TMP). The policies of this subarea plan encourage best practices in street design such as integration of green infrastructure and low impact development, which are promoted in the TMP, along with provision of complete streets with facilities for all modes of transportation. Proposed capital improvements of the subarea plan support the TMP’s methodology of placing a higher priority on pedestrian and bicycle connectivity and safety.



*Twin Ponds Playfield*

## Environmental Benefits of Integrated Land Use and Transportation

By locating a diversity of higher density housing options in proximity to high-capacity transit, and improving pedestrian, bicycle, and local transit connectivity to and from the light rail station, the subarea plan effectively integrates land use and transportation. This is a key premise of smart growth and many of the adopted plans and policies discussed above.

By creating a more compact, walkable, and bikeable transit-oriented community, citizens will have more options about how to travel in Shoreline, reducing reliance on driving. Encouraging infill development reduces average trip distances and costs of transportation infrastructure by locating new development in already developed areas, so that activities are close together. Encouraging growth inward also reduces suburban sprawl and degradation of natural areas and greenfields at the perimeter of the region. Other environmental benefits, as discussed earlier in this chapter, include reduced greenhouse gas emissions, air pollution, and energy use as a result of integrating land use and transportation systems.

With redevelopment, existing surface water management and water quality conditions would improve given the more stringent regulations in place today compared to when the neighborhood originally developed.

The City of Shoreline encourages green buildings and low impact development, which is another component of how land use can support smart growth principles and implement environmental policies, while improving quality of life for residents.

- ▶ **SHORELINE PARKS, RECREATION, AND OPEN SPACE MASTER PLAN (WHICH ALSO FUNCTIONS AS THE PARKS, RECREATION, AND OPEN SPACE ELEMENT OF THE COMPREHENSIVE PLAN)**—Consistent with the Parks, Recreation, and Open Space (PROS) Master Plan, this subarea plan proposes that parks and recreation facilities be provided to support the new transit-oriented community as it develops over time. Implementation of the subarea plan also will preserve, protect, and enhance natural resources and will provide for transportation options to better connect citizens to recreation and cultural facilities, which are key policies of the PROS plan.
- ▶ **SHORELINE SURFACE WATER MASTER PLAN**—Redevelopment and street improvements will be required to meet the provisions of the Surface Water Master Plan, as well as Washington State Department of Ecology requirements pertaining to surface water management and water quality. Capital projects as well as private developments will integrate green stormwater infrastructure solutions to meet these requirements. Overall, the surface water system will be improved with redevelopment over current conditions since much of the subarea was developed in an era without the level of stormwater regulation that is in place today.



*Popular Modes of Travel in the Seattle Area*

## Enhanced Neighborhood Character

Addition of light rail service and modifications to zoning and development regulations will change the existing single family character of the neighborhoods over time. Some consider this to be potentially detrimental or out of sync with their expectations, but others foresee regional investment in the local community as a mechanism to bring desired positive changes. Attractive streetscapes, public spaces, quality architecture, sidewalk cafes, public art, and new landscaping will be encouraged or required as part of new development along key corridors. The subarea plan calls for creating a distinctive, attractive transit-oriented community surrounding the light rail station, with a strong sense of place and physical improvements that foster civic pride and community cohesion. The City has drafted code language to encourage quality, context-sensitive design for development, and will prioritize capital projects to enhance pedestrian and bicycle connectivity that supports neighborhood access to and from the station, as well as within subarea neighborhoods.

## Upgraded Infrastructure

Implementing redevelopment proposed in this subarea plan will result in specific infrastructure upgrades, including street and intersection improvements for all modes; expansion of the pedestrian, bicycle, and local transit network; and utility system upgrades with water, sewer, surface water management, energy, and communications services that have capacity to accommodate growth over time. As a result of adoption of the subarea plan, infrastructure agencies and service providers will need to update their systems plans, and then procure funding for, and implement improvements to their facilities to serve the expected new customers and land uses in the subarea over time as redevelopment occurs.



## Economic Benefits and More Disposable Household Income

One direct economic benefit of TOD is increased ridership, which supports the long term sustainability of the transit system. Other economic and financial benefits include new investment leading to revitalization of neighborhoods, financial gains for joint development opportunities, and the potential for increased value for those who own land and businesses near the station.

Financial returns over time can benefit property owners. As discussed in Chapter 4, walkable, transit-oriented neighborhoods typically experience increases in property values and have higher residential and commercial rents, retail revenues, and for-sale housing values than less walkable places. (The potential for corollary property tax increases is also discussed in Chapter 4). A key consideration in this regard is to ensure adequate measures are in place for the provision of affordable housing options. The City has several provisions that encourage, incentivize, and require affordable housing as part of redevelopment projects that will help to minimize gentrification in the subarea.

Another benefit of redevelopment in an already developed area (rather than in an undeveloped, greenfield area) is that infrastructure improvement costs are often lower. While the street network will need to be improved and utility systems expanded over time to serve growth, there is already a system of infrastructure in the station subarea. As such, overall infrastructure improvement costs will be less than if the development were to occur in an undeveloped area—a more efficient and cost-effective growth strategy for the region.

As mentioned in the introduction of this chapter, transportation ranks behind housing and the second highest expense for households. When residents can live near high-capacity transit and in walkable and bikeable communities, they don't have to drive as much. Some of their typical household income spent on driving can go toward other household

expenses. Studies have shown that living in a transit-oriented community can increase disposable income by reducing household driving costs.

It will take time to develop the amenities of walkable neighborhood where needs for goods and services can be met locally. As the neighborhood evolves and other technological and behavioral changes (such as ride-sharing options) become more common, one goal of subarea planning has been that households in proximity to the light rail stations could own, on average, one car instead of two. One estimate shows a household could save \$3,000 to 4,000 per year by eliminating the need for a second car when you factor in the costs of insurance, parking, fuel, car payments, maintenance, and other expenses related to vehicle ownership and use.

## Community Health and Livability

There is a growing interest in living in walkable, transit-oriented communities in the US. People want to live closer to work, shopping, doctors' offices, school, parks, community services, and other destinations. More Baby Boomers and young working professionals and families of the Millennial generation are flocking to urban areas and the amenities of living in an urban neighborhood with a walkable and bikeable network and transit access.

Walkable, bikeable communities connected to high-capacity transit lead to more healthy and active lifestyles. America's population is aging. As many homeowners seek opportunities to "age in place" in communities that meet their needs, some are also looking to downsize into smaller homes and multifamily options. Living in a neighborhood with good access to high-capacity transit helps to serve their needs as they grow older and drive less. Studies indicate that men and women typically stop driving in their mid to late 70s. This means they may have many years of independent or assisted living, within which being in an accessible neighborhood with good access to transit would be of great benefit.



The amenities of an urban neighborhood appeal to a growing number of people who are in their 50s and above. Market researchers are seeing a trend toward trading suburban homes with condos and apartments in vibrant, urban neighborhoods.

While parents of the Baby Boom generation tended to retire in warmer climates or age-restricted communities, researchers speculate that the Boomers will prefer the enforced minimalism of urban environments. Smaller, more efficient living spaces and minimal or no yards reduce the amount of time they have to spend on maintenance and upkeep, giving them more free time in for other activities in retirement. Living near transit allows them the opportunity to go to events, concerts, art galleries, museums, shops, theaters, and other places in the urban area without having to drive. The online real estate company of Redfin estimates that more than a million Baby Boomers moved from neighborhoods 40 to 80 miles outside of downtown city areas to be in more urban areas between 2000 and 2010 and this trend is continuing in this decade.

With chronic disease as a growing concern in the US, living in a transit-oriented, walkable community can greatly improve health. This is particularly true for low-income neighborhoods, since they have disproportionately high rates of chronic disease and generate higher per-person health care expenditures. In review of the underlying conditions of chronic disease and health care costs, one of the most significant drivers is the level of increasing obesity in America. With more than one-third of its adult population obese, the US is facing an issue of epidemic proportions. Hypertension, dyslipidemia, type 2 diabetes, coronary heart disease, stroke, osteoarthritis, respiratory problems, and certain cancers, including endometrial, breast, and colon cancer, are among the known correlates to obesity.

Current health care costs associated with obesity are estimated at nearly 10 percent of nearly all medical expenses and could reach to 16-18 percent by 2030 if current trends continue.

The more residents can walk and bike to and from transit and to get around their neighborhoods, the healthier they will be.



*Shoreline's Farmers Market*

Multiple research studies have demonstrated a clear relationship among the design of the built environment, walkability, and health. These studies have found that residents of TOD neighborhoods drive less and walk more as part of their daily activities. An Active Living Research study of residents in 33 California cities revealed that the obesity rate among adults who drove the most was 27 percent, which is about three times higher than the obesity rate among those who drove the least (9.5 percent). In another study, researchers compared two groups of randomly selected commuters in Charlotte, North Carolina, where a new light rail system was built. After one year, commuters who regularly took the new train were, on average, 6.45 pounds lighter than those who continued driving to work.

In addition to the impact on obesity and chronic disease, more walking and less driving produces a number of ancillary benefits, including reduced stress and greater neighborhood sociability.

Research shows that living in a more walkable neighborhood or community also brings livability and social benefits. People know more of their neighbors in a walkable area and tend to be more actively involved in their community. They are more active, healthier, and happier on average. People who live in walkable communities feel that they

have more friends, and feel that their neighborhoods are safer and more active. People are more connected to and invested in their community in a walkable area. Studies show that more volunteerism and community building activities occur in these areas. People also are willing to pay more to live in a walkable community in recognition of these benefits.

## Summary—The Triple Bottom Line

When considering outcomes in planning, there is often a consideration of the “triple bottom line”—financial, social, and environmental performance. This subarea plan proposes a strong triple bottom line solution for the community and the region that enhances sustainability and livability for all through improved economic, social, and environmental outcomes. Focusing growth around transit stations capitalizes on the expensive public investments in transit and supporting infrastructure by producing local and regional benefits.

Successful redevelopment in the subarea will result in a diversity of new housing choices and mixed use development with neighborhood-supporting retail and services in an attractive, walkable village surrounding the planned light rail station. Implementing the subarea plan will connect people to jobs through high-capacity transit and offer many benefits for residents in the subarea. Ideally, people will have access to an affordable and active lifestyle with places where their children can play and they can grow old comfortably.

Any change can be unnerving, and the neighborhood will likely experience “growing pains” as it transitions over time. Yet important environmental goals can be realized as well. One objective of station subarea planning is that people will be able to ride transit, walk, and bicycle more, and drive less, reducing regional congestion, air pollution, and greenhouse gas emissions. Another is that through responsible, sustainable, and green building and site development, natural resources

will be protected, stormwater will be well-managed, water quality will be improved, and opportunities to enhance the neighborhood with new trees, rain gardens, and other landscaping will be realized.

With regard to social equity considerations, creating and preserving affordable housing and providing greater choice in housing styles supports diverse needs and preferences. This includes homeownership and rental opportunities for evolving markets, live/work lofts to attract “the creative class”, and a range of price points and design options suited to demographics like Millennials and Aging Boomers. A transit-oriented community will facilitate more healthy and active lifestyles. New public spaces, parks, streetscapes, and places to gather and socialize will offer an enhanced quality of life and vibrancy to the neighborhoods of the subarea.

Expanded mobility choices that reduce dependence on the automobile will reduce transportation costs and free up household income for other purposes. Shoreline citizens will have improved access to jobs and economic opportunity, including folks with lower incomes and working families.

With regard to economic development, the proposed subarea plan will lead to increased transit ridership and fare revenue, sustainably supporting the system over the long term. There is the potential for added value created through increased and/or sustained property values. Allowing new uses in areas that have historically been strictly residential creates entrepreneurial and other employment opportunities, and provides a customer base to support such neighborhood-serving businesses.

All of these benefits directly translate to a strong triple bottom line outcome for Shoreline and the Puget Sound Region.